Genetics

VARIATIONI IN MICROSATELLITE LOCI IN *ACACIA BREVISPICA* FROM MPALA RESEARCH CENTRE, KENYA, Leila Mbazogho Ndong, Adriana Otero Arnaiz, Andrew Schnabel*, Department of Biological Sciences, Indiana University South Bend, South Bend, IN 46634, leilandong@yahoo.fr

Acacia is a genus of trees widely distributed in arid tropic and subtropical regions. In countries of East Africa, acacia species form the dominant woody vegetation. Flower visitation by insect pollinators and the daily timing of pollen release in two East African sites show that co-flowering acacia species in a community share insect pollinators and that each species releases its pollen at specific, but different, times during the day. This suggests competition for pollinators may be important in driving the pollen release time of different acacias within these communities. One of the main questions in this system concerns the spatial distance over which competition among acacia species is occurring, or more precisely, how far insect pollinators are carrying pollen between plants. We plan to estimate pollen movement distances through analyses of microsatellite markers of parents and offspring in two populations of *Acacia brevispica*, which is an important and widespread species within the acacia communities of Kenya. Genomic DNA from about 800 individuals, representing eight *A. brevispica* populations, was extracted and purified. Microsatellite loci were then amplified by the Polymerase Chain Reaction using 27 primer pairs. Genotypes of 16-55 individuals at each locus were determined using the DNA sequencing facility at Indiana University Bloomington. Hardy-Weinberg analyses of the frequency data suggest that several loci contain null alleles, whereas other loci will be suitable for use in future paternity analyses.